

AMENDMENTS TO THE CLAIMS

1. (Currently amended) **Assay** An assay for testing a sample for the presence or absence of inhibition of the enzymatic conversion of 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate into isopentenyl diphosphate and/or dimethylallyl diphosphate by the following steps:

- (a) reacting an aqueous mixture containing 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate, a 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate reductase, and a reducing agent under predetermined reaction conditions for a predetermined period of time;
- (b) analyzing the reaction mixture obtained in step (a) for the consumed amount of 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate and/or said reducing agent and/or for the produced amount of isopentenyl diphosphate, and/or dimethylallyl diphosphate and/or an oxidation product of said reducing agent;
- (c) repeating step (a) in the presence of the sample to be tested;
- (d) repeating step (b) with the reaction mixture defined in step (c);
- (e) comparing the results of steps (b) and (d).

2. (Currently amended) **Assay** An assay for testing a sample for the presence or absence of inhibition of the enzymatic conversion of 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate into isopentenyl diphosphate and/or dimethylallyl diphosphate by the following steps:

- (a) reacting an aqueous mixture containing 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate, a 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate reductase, NAD(P)H, flavodoxin, and a flavodoxin reductase under predetermined reaction conditions for a predetermined period of time;
- (b) analyzing the reaction mixture obtained in step (a) for the consumed amount of 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate and/or NAD(P)H and/or for the produced amount of isopentenyl diphosphate, and/or dimethylallyl diphosphate and/or NAD(P)⁺;
- (c) repeating step (a) in the presence of the sample to be tested;

- (d) repeating step (b) with the reaction mixture defined in step (c);
 - (e) comparing the results of steps (b) and (d).
3. (Currently amended) ~~Assay~~ The assay according to claim 2, wherein the consumed amount of NAD(P)H is measured photometrically.
4. (Currently amended) ~~Assay~~ The assay according to claim 2 ~~or 3~~, whereby in steps (b) or (d) the produced amount of NAD(P)⁺ or isopentenyl diphosphate and/or dimethylallyl diphosphate is tested.
5. (Currently amended) ~~Assay~~ The assay according to claim 4, wherein the produced amount of NAD(P)⁺ is measured photometrically.
6. (Currently amended) ~~Assay~~ The assay according to ~~one of claims 1 to 6~~ claim 2 to 6, wherein NADPH is used as said NAD(P)H.
7. (Currently amended) ~~Assay~~ The assay according to ~~one of claims 1 to 6~~ claim 2, wherein after the predetermined period of time the reaction is stopped by addition of trichloroacetic acid.
8. (Currently amended) ~~Assay~~ The assay according to ~~one of claims 1 to 7~~ claim 2, wherein steps (a) and (c) are carried out at 37°C for 1 hour under aerobic conditions.
9. (Currently amended) ~~Assay~~ The assay according to ~~one of claims 1 to 7~~ claim 2, wherein steps (a) and (c) are carried out under anaerobic conditions.
10. (Currently amended) ~~Assay~~ The assay according to ~~one of claims 1 to 9~~ claim 2, wherein said 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate reductase is IspH.
11. ~~Sample~~ A sample capable of inhibiting the enzymatic conversion of 1-hydroxy-2-methyl-(E)-butenyl 4-diphosphate into isopentenyl diphosphate and/or dimethylallyl diphosphate identified according to ~~one of claims 1 to 10~~ claim 2.